

1. Identification of the Substance and the Company

1.1. Product identifier

Product name	Symbio Thatch Eater
REACH registration notes	Exempt from REACH registration according to Regulation (EC) No. 1907/2006 (REACH)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	A microbial preparation for use on sports turf to degrade thatch
	Not for oral consumption or direct contact with food or beverages
	Avoid extreme heat and ignition sources

1.3. Details of the supplier of the safety data sheet

Company name:

Origin Amenity Solutions Ltd
1-3 Freeman Court,
Jarman Way,
Orchard Road,
Royston,
Hertfordshire,
SG8 5HW

Tel: 0800 138 7222

Email: sales.symbio@originamenity.com

1.4 Emergency Telephone No. :

Emergency phone No. 0800 138 7222 (09.00 – 17.00 GMT Monday – Friday)

National emergency telephone number 111

2. Hazards Identification

2.1. Classification of the substance or mixture

Chemical characterization:	Mixture
Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified

According to Regulation (EC) No 1272/2008: not classed as hazardous

2.2. Label elements

None required
Not a hazardous mixture according to Regulation (EC) No. 1272/2008

2.3. Other hazards

The mixture does not fulfil the criteria for PBT or vPvB substance
The bacteria and fungi in this mixture are considered to belong to hazard group 1 as defined by the Advisory Committee on Dangerous Pathogens (ACDP) as “a biological agent unlikely to cause human disease”. It should NOT be assumed. However, that this organism will be innocuous in all situations or that infections can never occur. The mixture should therefore not be used by, or in the presence of immunocompromised persons.

This product does not meet the criteria for classification as hazardous as defined in the Regulation EC 1272/2008 and in Directive 67/548/EEC. However, handling and/or processing this material may generate dust which can cause mechanical irritation of the eyes, skin, nose and throat. Depending on the type of handling and use, airborne respirable crystalline silica may be generated. Prolonged and/or excessive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable crystalline silica dust should be monitored and controlled.

3. Composition/Information on Ingredients

3.2. Mixtures

A mixture containing beneficial bacteria and fungi, on a natural aluminosilicate mineral base. None of the organisms used in these products have been genetically modified.

Name	Product Identifier	Classification ¹	Concentration (w/w%)
Quartz	CAS no: 14808-60-7	Not classified (WEL)	≤ 3%
Potassium Nitrate	CAS no: 7757-79-1	Ox. Sol. 3; H272	≤ 2%
Wheat flour	CAS no: 130498-22-5	Not classified (WEL)	≤ 2%

¹ For full text of the H-Statements mentioned in this section, see section 16

4. First Aid Measures

4.1. Description of first aid measures

Inhalation	Remove to fresh air and keep at rest. Get medical attention if any discomfort continues.
Ingestion	Rinse out mouth with water and seek medical advice if discomfort continues.
Skin contact	Wash hands and exposed skin with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 10 minutes. Get medical attention if symptoms persist.

4.2. Most important symptoms and effects, both acute and delayed

Not expected to present a significant hazard under anticipated conditions of normal use
Severity of symptoms will vary depending on concentration and length of exposure

4.3. Indication of any immediate medical attention and special treatment needed

No specific measures noted. If you feel unwell, seek medical advice
Follow advice in 4.1

5. Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire
Unsuitable extinguishing media	Not applicable.

5.2. Special hazards arising from the substance or mixture

Specific hazards None known.

5.3. Advice for firefighters

Protective actions during firefighting: No specific firefighting precautions known.
Special protective equipment for firefighters: Use protective equipment appropriate for surrounding materials.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid airborne dust generation, do not breathe dust Keep ignition sources away – no smoking Wear suitable respiratory protection, eye protection gloves and overalls in compliance with national regulation. Avoid contact with eyes and skin
----------------------	--

SAFETY DATA SHEET
SYMBIO THATCHEATER

SDS COMPLETED 2ND SEPTEMBER 2015
DATE OF REVIEW: 3RD JUNE 2020

VERSION 01
REVISION NO. 01

Wash hands and exposed skin after handling

6.2. Environmental precautions

Environmental precautions No special precautions
No known adverse environmental effects.
Avoid the spillage or runoff entering drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Sweep up spills carefully to minimise airborne dust, transfer to suitable container and keep safe for disposal.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

7. Handling and Storage

7.1. Precautions for safe handling

Usage precautions: Read the label before use. Ensure adequate ventilation; or provide appropriate exhaust ventilation. Avoid dust formation, do not breathe dust, in cases of prolonged exposure wear suitable respiratory protective equipment. Employees should wear protective work clothing, shoes, gloves and safety glasses.
General Hygiene: Wash hands after working with product. Do not smoke, eat or drink when handling product.

7.2. Conditions for safe storage, including any incompatibilities

Store in original containers in a cool dry and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and high humidity. Minimise airborne dust generation

7.3. Specific end use(s)

Specific end use(s) This mixture is designed for use on sports turf to degrade thatch.

8. Exposure controls/ Personal protection

8.1. Control parameters

Ingredients with limit values that require monitoring

Name	Product Identifier	Limit value (UK) ¹
Quartz Dust (inhalable) Dust (respirable) Respirable fraction	CAS no: 14808-60-7	10mg/m ³ 8 hours TWA 4mg/m ³ 8 hours TWA 0.1mg/m ³ 8 hours TWA
Wheat flour	CAS no: 130498-22-5	10mg/m ³ 8 hours TWA 30mg/m ³ 15-minute

¹For equivalent limits in other countries, please consult the local regulatory authority

8.2. Exposure controls

Engineering measures: Minimise airborne dust generation. All handling should only take place in well-ventilated areas. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. Keep personnel away from dusty areas. Remove and wash soiled clothing

Protective Equipment:
Respiratory protection Not usually required. However, in areas with inadequate ventilation, or in cases of prolonged exposure, wear respiratory protective equipment that complies with national legislation.

Eye/face protection Use eye protection. Goggles or face shields recommended.

Hand protection	For prolonged or repeated exposure wear protective gloves.
Other skin and body protection	Wear appropriate clothing to prevent repeated or prolonged skin contact.
Hygiene measures	Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

9. Physical and Chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Granules.
Colour	Light brown or grey.
Odour	Mild.
Odour threshold	Not determined.
pH	Slightly Alkaline
Melting point	Not relevant.
Initial boiling point and range	Not relevant.
Flash point	Not relevant.
Evaporation rate	Not relevant.
Flammability (solid, gas)	The product is not flammable.
Vapour pressure	Not relevant.
Vapour density	Not relevant.
Relative density	Not relevant.
Solubility(ies)	Not known.
Partition coefficient	Not known.
Auto-ignition temperature	Not relevant.
Decomposition Temperature	Not relevant.
Viscosity	Not relevant.
Explosive properties	Not relevant.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

No information required.

10. Stability and Reactivity

10.1. Reactivity

No specific reactivity hazards associated with this product or its ingredients.

10.2. Chemical stability

Stable under normal conditions of use. Store in a dry place.

10.3. Possibility of hazardous reactions

No potentially hazardous reactions known.

10.4. Conditions to avoid

No particular incompatibility

10.5. Incompatible materials

Materials to avoid Strong oxidizing agents, hydrofluoric acid. Avoid contact with moisture as product may become microbially active and deteriorate.

10.6. Hazardous decomposition products

None known.

11. Toxicological information

11.1. Information on toxicological effects

- a) Acute toxicity – not classified
- b) irritation – Classification criteria not met
- c) Corrosivity – not classified
- d) Sensitisation – Classification criteria not met
- e) Repeated dose toxicity – not classified
- f) Carcinogenicity – not classified
- g) Mutagenicity – not classified
- h) Toxicity for reproduction – not classified

Information on likely routes of exposure:

Inhalation: No known hazard

Skin: No known hazard

Eyes: No known hazard

Ingestion: May be harmful if ingested in large quantities

Additional toxicological information:

This product contains a natural aluminosilicate mineral.

Silicosis of the lung may result from excessive inhalation of respirable particles (up to 10 microns in size) over an extended period. Prolonged contact may cause dryness of the skin. Particles in the eyes may cause irritation.

The mycorrhizal fungi in this mixture are considered to belong to hazard group 1 as defined by the Advisory Committee on Dangerous Pathogens (ACDP) as “a biological agent unlikely to cause human disease”. It should NOT be assumed however, that this organism will be innocuous in all situations or that infections can never occur. The mixture should therefore not be used by, or in the presence of, immunocompromised persons.

If information is not listed in section 11 it is due to non availability of data or not appropriate.

12. Ecological information

Not classified

12.1. Toxicity

None known

12.2. Persistence and degradability

Persistence and degradability: The product is partially degradable but has an inert mineral base. The wheat flour substrate is biodegradable. The bacteria and fungi are naturally present in the environment.

12.3. Bioaccumulative potential

Partition coefficient Not expected to bioaccumulate.

12.4. Mobility in soil

Mobility No data available.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

None known.

13. Disposal considerations

13.1. Waste treatment methods

General information	Reuse or recycle products wherever possible. No specific disposal method required.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

14. Transport information

Not classified for transport

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

The preparation is exempt from REACH requirements.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

16. Other information

This safety data sheet has been prepared with reference to COSHH regulations 2002 (as amended) and workplace exposure limits 2005 (EH40/2005).

Text of Hazard statements mentioned in Section 3: H272 – May intensify fire; oxidiser

List of abbreviations:

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bio-accumulative

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

IATA: International Air Transport Association.

IMDG: International Maritime Dangerous Goods.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

WEL: Workplace Exposure Limits

CAS no. Chemical Abstracts Service number

TWA: Time Weighted Average

Indication of revisions:

Editorial changes throughout

Following sections have been revised:

Section 2.2: Label elements. Removal of precautionary statements – mixture is not classified as hazardous

Section 3.2: Mixture - update due to change in raw materials

Section 8.1: Control parameters – update due to change in raw materials

Section 11.1: Information on toxicological effects – update due to change in raw materials

Section 16: Inclusion of abbreviations used in SDS

This version supersedes all previous versions

Disclaimer

The information in this SDS was obtained from sources which we believe to be reliable. Origin Amenity Solutions provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate handling of the product by properly trained and qualified personnel. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Origin Amenity Solutions makes no warranties or guarantees either express or implied with respect to the information contained herein. The conditions or methods of handling, storage, use or disposal of the product are beyond our control, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product